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Investigation on the Behavior of Conventional Reinforced Coupling Beams

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Abstract : Coupled shear walls consist of two shear walls connected intermittently by beams along the height. The behavior of coupled shear walls is mainly governed by the coupling beams. The coupling beams are designed for ductile inelastic behavior in order to dissipate energy. The base of the shear walls may be designed for elastic or ductile inelastic behavior. The amount of energy dissipation depends on the yield moment capacity and plastic rotation capacity of the coupling beams. In this paper, an analytical model of coupling beam was developed to calculate the rotations and moment capacities of coupling beam with conventional reinforcement.

Keywords : design studies, computational model(s), case study/studies, modelling, coupling beam
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